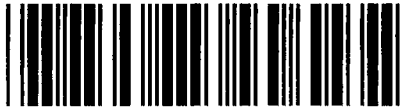




Control Number: 51840



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PUBLIC UTILITY COMMISSION  
AUSTIN, TEXAS

Via Electronic Filing

June 23, 2021

Filing Clerk  
Public Utility Commission of Texas  
1701 N. Congress Avenue  
Austin, TX 78711-3326

***RE: PUC Project No. 51840 Rulemaking Establishing Electric Weatherization Standards***

Dear Commission Staff:

Key Capture Energy, LLC (“KCE”) is a developer, owner, and operator of stand-alone battery storage projects in Texas. KCE affiliates currently have 29.7 MW of operating batteries in the ERCOT market and 200 MW of batteries under construction.

KCE offers the following comments in response to the “Public Notice of Request for Comments” issued by the staff of the Public Utility Commission of Texas in Project No. 51840 dated June 9, 2021. KCE believes that the following recommendations represent appropriate weatherization standards for containerized<sup>1</sup> battery storage projects operating as providers of electric generation service in the Electric Reliability Council of Texas (“ERCOT”) power region:

1. Air Infiltration Testing: Containerized battery storage projects should be required to perform air infiltration testing for a representative sample of containers at each project site. Infiltration testing ensures that the container envelope is airtight and adequately sealed against leaks. Testing should be performed using the ASTM E1827 testing standard or the ASTM E779 testing standard.<sup>2</sup> Battery projects should be required to meet the testing requirement of 0.25

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<sup>1</sup> Containerized battery projects house battery cells in a weather-resistant insulated metal enclosure and are typically contrasted with building solutions that house batteries in a building structure.

<sup>2</sup> <https://www.astm.org/Standards/E1827.htm>; <https://www.astm.org/Standards/E779.htm>



CFM at 75 Pa/ft<sup>2</sup> established by the “U.S. Army Corps of Engineers Air Leakage Test Protocol for Building Envelope”.<sup>3</sup>

2. HVAC Design Specification: Containerized battery storage projects should use an HVAC system that is able to keep battery cells within their manufacturer-specified nominal minimum and maximum temperature range across the full range of the project site’s minimum and maximum ambient temperatures as defined by the American Society of Heating, Refrigerating and Air-Conditioning Engineers (“ASHRAE”).<sup>4</sup> Battery storage projects should be required to provide computational fluid dynamics (“CFD”) analysis to demonstrate the project design is compliant.
3. Freezing Prevention: Any system requiring the use of liquid water or that is in danger of freezing under site minimum temperatures should have freeze prevention or freeze protection systems installed. For example, dry standpipe solutions can be used to prevent freezing in fire suppression systems.

KCE appreciates the opportunity to provide comment, and we are happy to address any follow up questions with Commission staff as needed.

Respectfully submitted,

/s/ Danny Musher

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<sup>3</sup> [https://www.wbdg.org/FFC/ARMYCOE/usace\\_airleakagetestprotocol.pdf](https://www.wbdg.org/FFC/ARMYCOE/usace_airleakagetestprotocol.pdf)

<sup>4</sup> <https://www.ashrae.org/technical-resources/bookstore/weather-data-center>